

APPENDIX 9:

CORRECTIVE ACTION ASSESSMENT WELL SCHEMATICS

“CTV II” STORAGE PROJECT

The following schematics provide depictions of the well(s) included in the Corrective Action Assessment in Attachment B: Area of Review and Corrective Action Plan. The Wellbore Diagrams illustrate the current condition of the well(s) along with the proposed corrected configuration required to isolate the injection zone associated with CTV II project.

Injection zone as well as corrective intervals have been indicated to illustrate required corrections. Proposed abandonment configurations show proposed cement plug depths to ensure confinement and non-endangerment of USDW.

MD
(TVD)

1,000

2,000

3,000

4,000

5,000

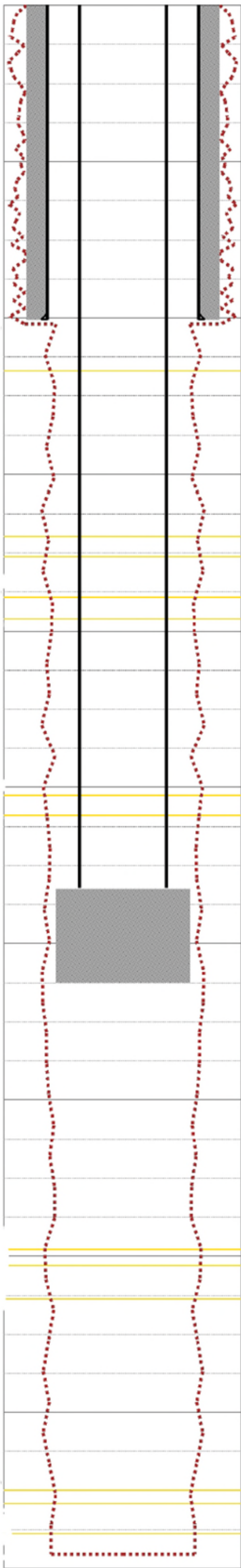
6,000
(5,999)

7,000
(6,998)

8,000
(7,996)

9,000
(8,990)

10,000
(9,982)



The [REDACTED] original hole was sidetracked by setting a cement plug from 5648' – 6246' MD, and the well was suspended with drilling mud below the plug. CTV will re-abandon the well and ensure isolation of the injection zone. CTV plans to re-enter the section of the well beneath the plug from ~5700' – 6500' MD, clean out the original openhole as deep as possible, and fill the well with Class G cement plugs to ensure isolation.

MD
(TVD)

1,000

2,000

3,000

4,000

5,000

6,000
(5,999)

7,000
(6,998)

8,000
(7,996)

9,000
(8,990)

10,000
(9,982)

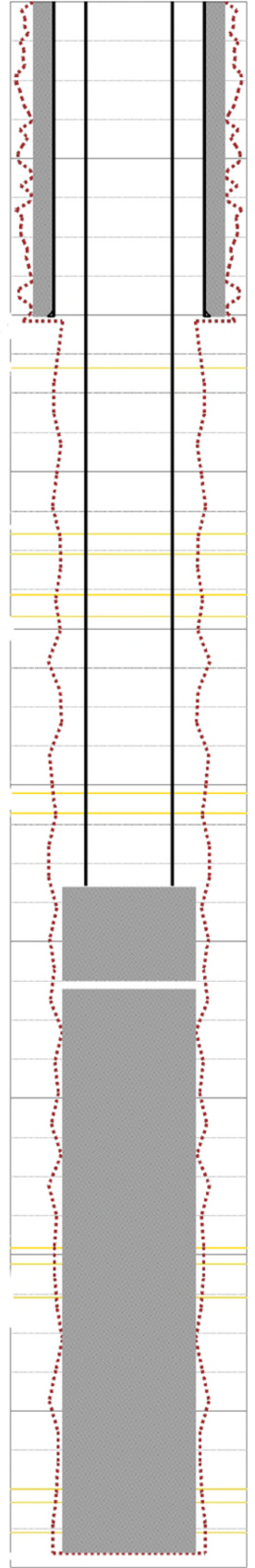


Figure 1A. Current Configuration

Figure 1B. Corrective Action

MD
(TVD)

1,000

2,000

3,000
(2,974)

4,000
(3,866)

5,000
(4,755)

6,000
(5,644)

7,000
(6,540)

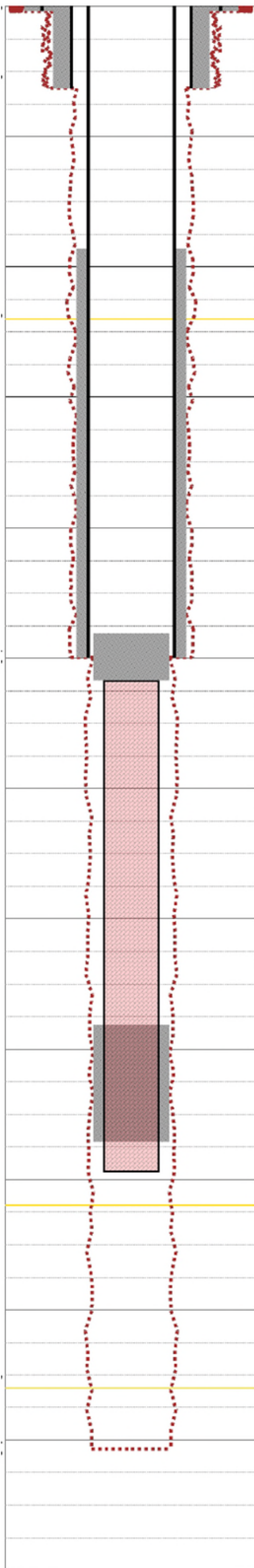
8,000
(7,432)

9,000
(8,338)

10,000
(9,238)

11,000
(10,127)

12,000
(11,043)



The [redacted] original hole was sidetracked by setting a cement plug from 4809' – 5166' MD, and the drill pipe fish was cemented in place from 7810' – 8708'. CTV will re-abandon the well and ensure isolation of the injection zone. CTV plans to re-enter the section of the well beneath the fish, clean out the original openhole as deep as possible, and fill the well with Class G cement plug(s) to ensure isolation.

MD
(TVD)

1,000

2,000

3,000
(2,974)

4,000
(3,866)

5,000
(4,755)

6,000
(5,644)

7,000
(6,540)

8,000
(7,432)

9,000
(8,338)

10,000
(9,238)

11,000
(10,127)

12,000
(11,043)

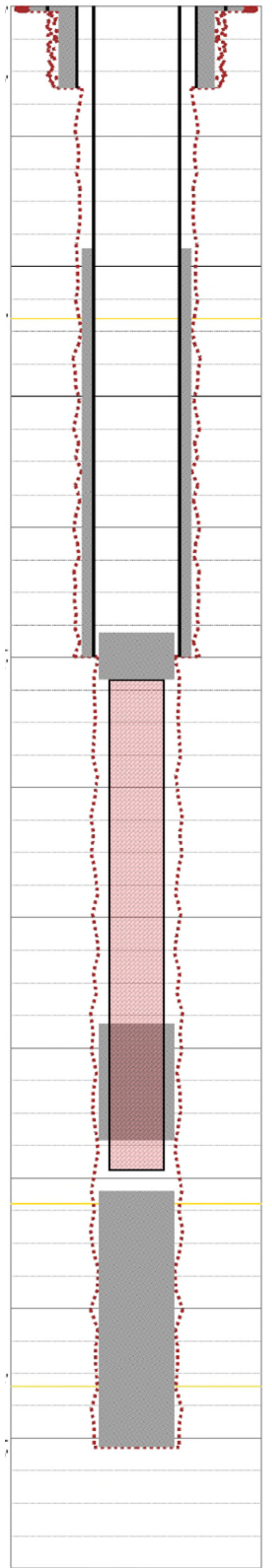
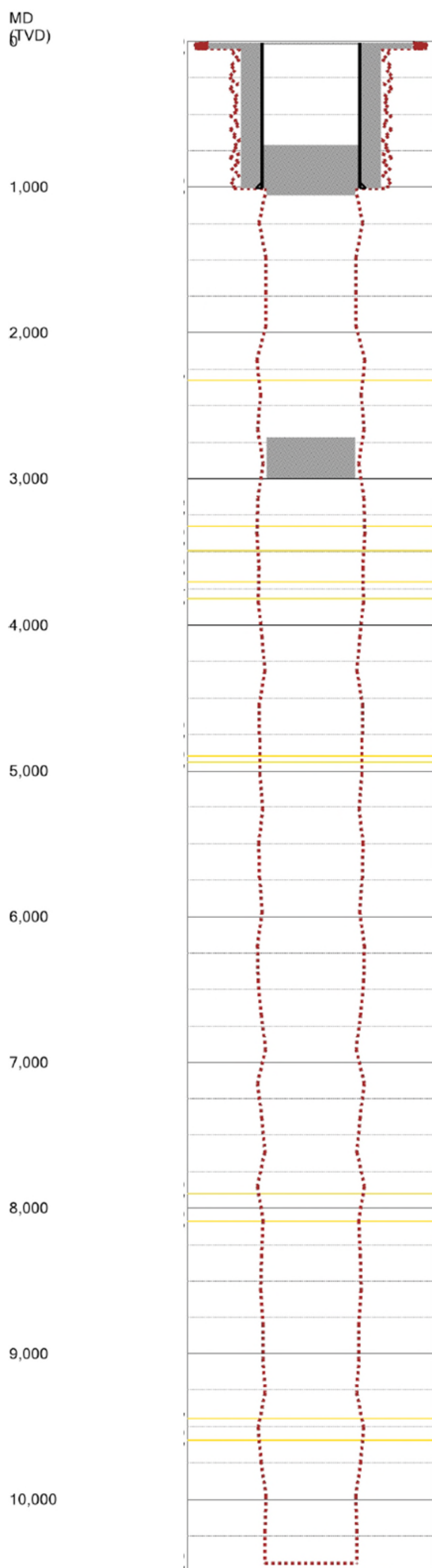


Figure 1A. Current Configuration

Figure 1B. Corrective Action



██████████ is a dry hole abandonment well that was not plugged to CCS specifications. CTV will re-abandon the well and ensure isolation of the injection zone. CTV plans to re-enter wellbore through the original surface casing, clean out the original openhole as deep as possible, and properly plug the well with Class G cement plugs to ensure isolation.

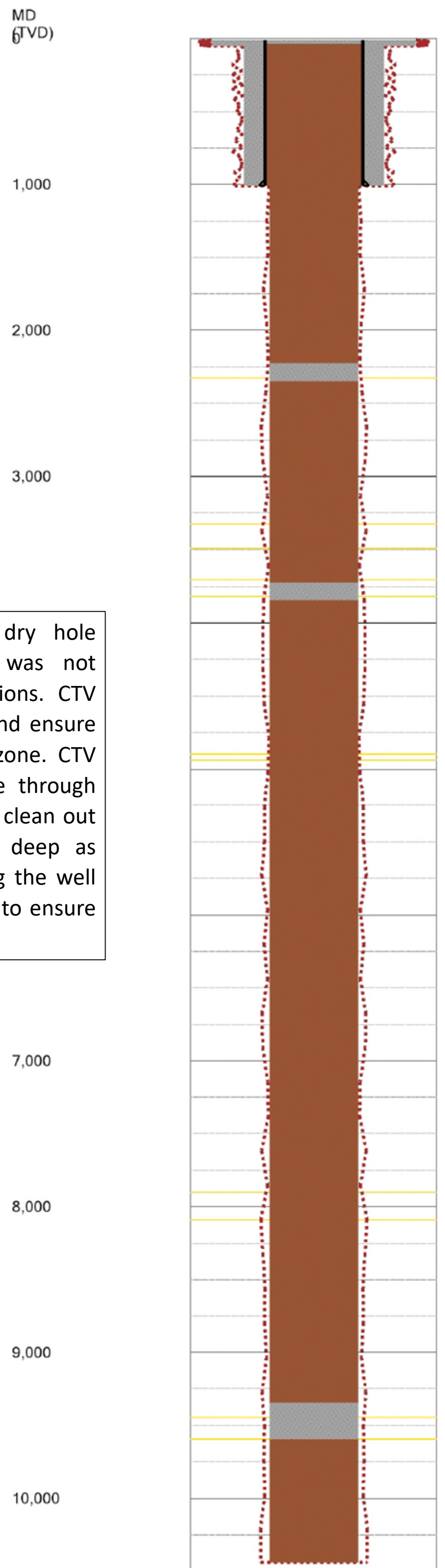


Figure 1B. Corrective Action

Figure 1A. Current Configuration

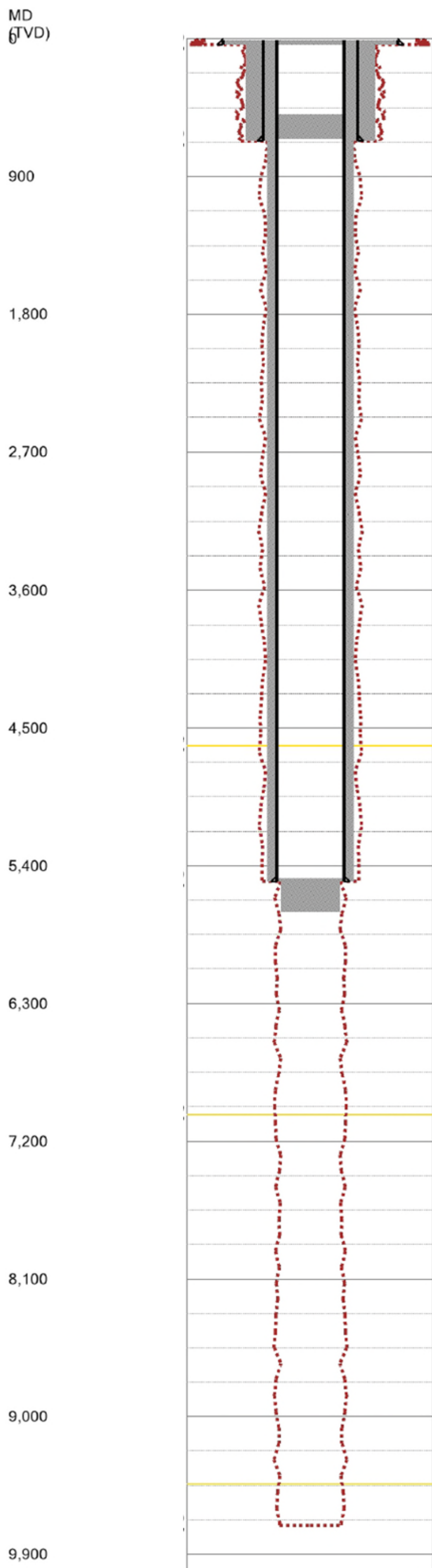


Figure 1A. Current Configuration

is a dry hole abandonment well that was not plugged to CCS specifications. CTV will re-abandon the well and ensure isolation of the injection zone. CTV plans to re-enter wellbore through the original intermediate casing, clean out the original openhole as deep as possible, and properly plug the well with Class G cement plugs to ensure isolation.

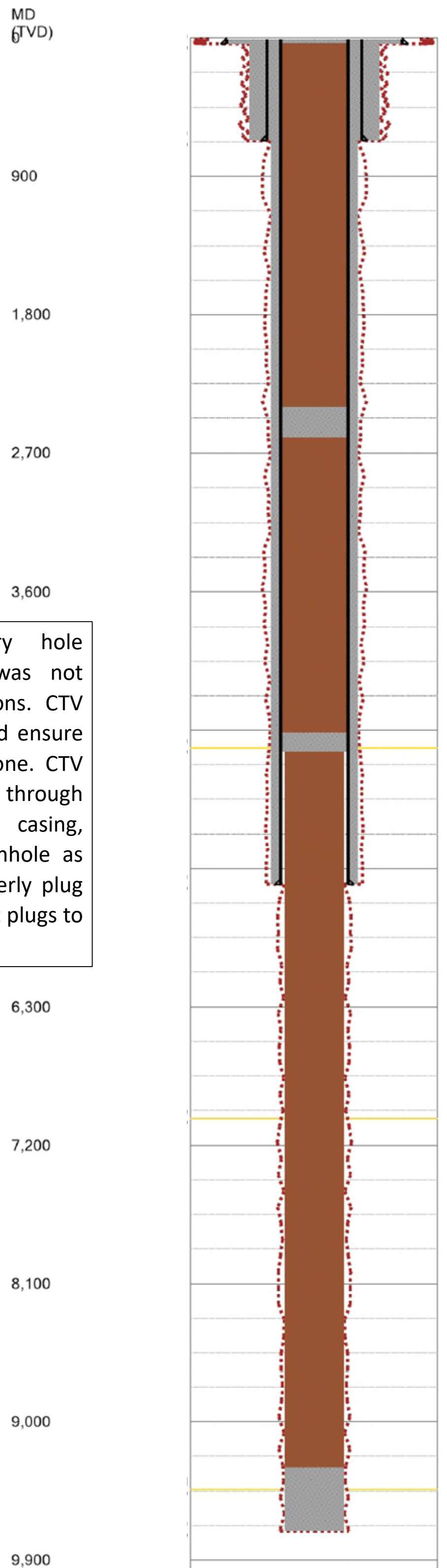


Figure 1B. Corrective Action